

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) An ink jet printer for making print on at least one recording paper, comprising:

a supporting axis; and

an ink carriage that reciprocates along the supporting axis, the ink carriage being adapted to be at least partially surrounded by the at least one recording paper and including ink heads each provided with an ink nozzle facing a different direction, such that printing is effected on the at least one recording paper simultaneously at more than one portion along a transportation direction in which the at least one recording paper is transported through a transportation path.

2. (currently amended) An ink jet printer for making print on at least one recording paper, comprising:

a supporting axis; and

an ink carriage that reciprocates along the supporting axis, the ink carriage being adapted to be at least partially surrounded by the at least one recording paper and including two ink heads each provided with an ink nozzle facing a different direction, such that printing is effected on the at least one recording paper simultaneously at two portions along a transportation direction in which the recording paper is transported through a single transportation path sequentially one by one.

3. (currently amended) The ink jet printer for making print on at least one recording paper~~ref Claim 2, further comprising:~~

a supporting axis;
an ink carriage that reciprocates along the supporting axis,
the ink carriage including two ink heads each provided with an ink
nozzle facing a different direction, such that printing is effected
on the at least one recording paper simultaneously at two portions
along a transportation direction in which the recording paper is
transported through a single transportation path sequentially one
by one; and

nozzle distance adjusting means for adjusting a distance between said ink nozzles facing different directions with respect to the transportation direction, such that printing is effected at two preset recording portions on said at least one printing paper by said two ink heads each provided with said ink nozzle facing the different direction.

4. (previously presented) The ink jet printer of Claim 3, further comprising:

extendable guiding means for guiding the at least one recording paper through the transportation path between said ink nozzles facing different directions whether the transportation path is extended or shortened.

5. (withdrawn) The ink jet printer of Claim 2, wherein each of said ink nozzles is provided with a plurality of ink holes aligned in a line slanted with respect to a running direction along said supporting axis and the transportation direction of the recording paper, and

said plurality of ink holes in one of said ink nozzles are shifted by half a pitch from said plurality of ink holes in the other ink nozzle as to intervals in at least one of the running direction along the supporting axis and the transportation direction of the recording paper.

6. (previously presented) The ink jet printer of Claim 2, wherein

first print data is printed by one of said ink nozzles and second print data is printed by the other ink nozzle, said second print data being different from said first print data.

7. (withdrawn) The ink jet printer of Claim 2, further comprising:

paper turnover means for turning over the recording paper in the transportation path between said ink nozzles.

8. (withdrawn) The ink jet printer of Claim 2, further comprising:

drying means provided in the transportation path for drying print made on the at least one recording paper.

9. (withdrawn) The ink jet printer of Claim 5, wherein said ink nozzle is provided for each color in case of color printing.

10. (previously presented) The ink jet printer of Claim 1, wherein said supporting axis is provided in a direction that intersects at right angles with the transportation direction of the at least one recording paper.

11. (currently amended) The ink jet printer of Claim 1, wherein said ink carriage has a front surface provided with a front ink nozzle and a back surface, opposing the front surface, provided with a back ink nozzle, and the transportation path is curved along the front surface and the back surface ~~each outer surface of said ink carriage.~~

12. (currently amended) The ink jet printer of Claim 1, wherein said ink carriage has a front surface provided with a front ink nozzle and a back surface, opposing the front surface, provided with a back ink nozzle, and the transportation path is curved along the front surface and the back surface ~~each outer surface of said ink carriage~~ such that a distance between the front surface and the recording paper and a distance between the back surface and the recording paper are ~~to have a substantially the same space therebetween.~~

13. (original) The ink jet printer of Claim 11, wherein the transportation path is curved substantially in a U-shape.

14. (currently amended) The ink jet printer of Claim 10, wherein at least one of said supporting axis and ink carriage is formed so as to be on an imaginary ~~a virtual~~ extension line of the transportation path extending toward said ink carriage.

15. (original) The ink jet printer of Claim 2, wherein an ink directing direction of each of said ink nozzles opposes each other.

16. (currently amended) The ink jet printer for making print on at least one recording paper ~~of Claim 15, further comprising:~~

a supporting axis; and
an ink carriage that reciprocates along the supporting axis,
the ink carriage including two ink heads each provided with an ink
nozzle facing a different direction, such that printing is effected
on the at least one recording paper simultaneously at two portions
along a transportation direction in which the recording paper is
transported through a single transportation path sequentially one
by one,
wherein an ink directing direction of each of said ink nozzles
opposes each other, and
wherein the ink directing direction of each of said two ink
nozzles is horizontal.

17. (new) The ink jet printer of Claim 1, further comprising:

a length adjusting roller provided parallel to the supporting axis and adapted to selectively move toward and away from the supporting axis to adjust a length of the transporting path between two portions at which printing is effected.

18. (new) The ink jet printer of Claim 17, wherein the length adjusting roller adjust the length of the transporting path between the two portions at least to a length of the recorded paper.

19. (new) The ink jet printer of Claim 2, further comprising:

a length adjusting roller provided parallel to the supporting axis and adapted to selectively move toward and away from the supporting axis to adjust a length of the transporting path between two portions at which printing is effected.

Appl. No.: 09/670,840

Docket No.: 1248-0518P

Reply to Office Action of November 13, 2003

20. (new) The ink jet printer of Claim 19, wherein the length adjusting roller adjust the length of the transporting path between the two portions at least to a length of the recorded paper.

Appl. No.: 09/670,840
Docket No.: 1248-0518P
Reply to Office Action of November 13, 2003

AMENDMENTS TO THE DRAWINGS

Attached hereto is one (1) replacement sheet(s) of corrected formal drawings that comply with the provisions of 37 C.F.R. § 1.84. This replacement sheet(s), which depicts Figure 7(b), replaces the original sheet depicting Figure (7).